

EXHIBIT A

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>“signal(s) of interest”</p> <p><u>'134 patent, claim 1:</u></p> <p>A method comprising:</p> <p>over-sampling, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include <u>signals of interest</u> and interference generating signals, the interference generating signals capable of generating intermodulation products inband of the <u>signals of interest</u>;</p> <p>isolating <u>signals of interest</u> in the bit stream using one or more decimating filters;</p> <p>isolating source signals that generate one or more intermodulation products inband of the <u>signal of interest</u> using one or more decimating filters;</p> <p>computing an estimate of each of the one or more intermodulation products from the source signals that generate the one or more intermodulation products;</p> <p>cancelling out one or more inband intermodulation products using the estimate of the intermodulation products; and</p> <p>performing phase and amplitude adjustment on estimations of the intermodulation product interfering signals in a closed loop manner, wherein performing phase and amplitude adjustment of the estimations comprises</p>	[AGREED]	[AGREED]	<p>with respect to the receiver, a signal that the receiver is trying to receive and send, in digital form, to/from the baseband processor.</p>

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>performing sub-sample phase shifts to make a phase adjustment on the estimations of the intermodulation product interfering signals.</p> <p><u>'134 patent, claim 2:</u></p> <p>An apparatus comprising:</p> <p>means for over-sampling, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include <u>signals of interest</u> and interference generating signals, the interference generating signals capable of generating intermodulation products inband of the <u>signals of interest</u>;</p> <p>means for isolating <u>signals of interest</u> in the bit stream using one or more decimating filters;</p> <p>means for isolating source signals that generate one or more intermodulation products inband of the <u>signal of interest</u> using one or more decimating filters;</p> <p>means for computing an estimate of each of the one or more intermodulation products from the source signals that generate the one or more intermodulation products;</p> <p>means for canceling out one or more inband intermodulation products using the estimate of the intermodulation products; and</p> <p>means for performing phase and amplitude adjustment on estimations of the intermodulation product interfering signals in a closed loop manner, wherein the means for performing phase and amplitude adjustment of</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>the estimations comprises means for performing sub-sample phase shifts to make a phase adjustment on the estimations of the intermodulation product interfering signals.</p> <p><u>'134 patent, claim 3:</u></p> <p>An apparatus comprising: a sampling unit to sample, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include <u>signals of interest</u> and interference generating signals, the interference generating signals capable of generating intermodulation products inband of the <u>signals of interest</u>; one or more filters to isolate <u>signals of interest</u> and interfering signals in the bit stream; a cancellation unit to cancel out isolated interference generated signals using estimations of the intermodulation products generated by the isolated interfering signals, wherein the estimations of the isolated interfering signals comprise estimations of intermodulation products falling inband of the <u>signals of interest</u>; and a phase and amplitude adjuster to adjust the phase and amplitude of estimations of the isolated interfering signals in a closed loop manner, wherein the phase and amplitude adjuster performs phase and amplitude adjustment of the estimations by making sub-sample phase shifts to make a phase adjustment</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>on the estimations of the isolated interfering signals.</p> <p><u>'134 patent, claim 4:</u></p> <p>A method comprising:</p> <p>outputting a pair of identical digital samples from a sigma delta analog to digital converter (ADC) after sampling an intermediate frequency signal with the sigma delta ADC;</p> <p>applying a first decimating filter to one of the pair to perform a bandpass operation to obtain a <u>signal of interest</u> with in-band interference intermodulation products, wherein the first decimating filter comprises a finite impulse response (FIR) filter;</p> <p>applying a second decimating filter to the other pair to perform a band reject operation for the <u>signal of interest</u> to create out of band signals that are a source of the in-band interference intermodulation products, wherein the second decimating filter comprises a FIR filter;</p> <p>generating an estimate of in-band intermodulation interference based on the out of band signals; and</p> <p>adding an inverted version of the estimate of in-band intermodulation interference to the <u>signal of interest</u> having the in-band interference intermodulation products to cancel interference caused thereby and create a resulting signal, wherein the first and second FIR filters are</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>applied at a rate at which the sigma delta ADC is applied.</p> <p><u>'134 patent, claim 20:</u></p> <p>A method comprising: receiving a signal comprising a <u>signal of interest</u> and one or more source signals; generating a sampled data stream by oversampling the received signal over a receiver bandwidth at a low resolution; recovering one or more of the source signals from the sampled data stream; using a digital process to estimate an intermodulation product in real time using the one or more recovered source signals; generating an intermodulation cancellation signal in real time from the estimate of the intermodulation product; and using the intermodulation cancellation signal to cancel the intermodulation product in a bandwidth of the <u>signal of interest</u>.</p>			
<p>“source signal(s)”</p> <p><u>'134 patent, claim 1:</u></p> <p>A method comprising: over-sampling, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference generating signals, the interference generating signals</p>	[AGREED]	[AGREED]	signals that mix in the nonlinearities to produce intermodulation products that fall in-band of the signal of interest

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>capable of generating intermodulation products inband of the signals of interest; isolating signals of interest in the bit stream using one or more decimating filters; isolating <u>source signals</u> that generate one or more intermodulation products inband of the signal of interest using one or more decimating filters; computing an estimate of each of the one or more intermodulation products from the <u>source signals</u> that generate the one or more intermodulation products; cancelling out one or more inband intermodulation products using the estimate of the intermodulation products; and performing phase and amplitude adjustment on estimations of the intermodulation product interfering signals in a closed loop manner, wherein performing phase and amplitude adjustment of the estimations comprises performing sub-sample phase shifts to make a phase adjustment on the estimations of the intermodulation product interfering signals.</p> <p><u>'134 patent, claim 2:</u></p> <p>An apparatus comprising: means for over-sampling, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference generating signals, the interference generating</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>signals capable of generating intermodulation products inband of the signals of interest; means for isolating signals of interest in the bit stream using one or more decimating filters; means for isolating source signals that generate one or more intermodulation products inband of the signal of interest using one or more decimating filters; means for computing an estimate of each of the one or more intermodulation products from the source signals that generate the one or more intermodulation products; means for canceling out one or more inband intermodulation products using the estimate of the intermodulation products; and means for performing phase and amplitude adjustment on estimations of the intermodulation product interfering signals in a closed loop manner, wherein the means for performing phase and amplitude adjustment of the estimations comprises means for performing sub-sample phase shifts to make a phase adjustment on the estimations of the intermodulation product interfering signals.</p> <p><u>'134 patent, claim 20:</u></p> <p>A method comprising: receiving a signal comprising a signal of interest and one or more source signals;</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>generating a sampled data stream by oversampling the received signal over a receiver bandwidth at a low resolution; recovering one or more of the <u>source signals</u> from the sampled data stream; using a digital process to estimate an intermodulation product in real time using the one or more recovered <u>source signals</u>; generating an intermodulation cancellation signal in real time from the estimate of the intermodulation product; and using the intermodulation cancellation signal to cancel the intermodulation product in a bandwidth of the signal of interest.</p>			
<p>“intermodulation product(s)” <u>’134 patent, claim 1:</u> A method comprising: over-sampling, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference generating signals, the interference generating signals capable of generating <u>intermodulation products</u> inband of the signals of interest; isolating signals of interest in the bit stream using one or more decimating filters; isolating source signals that generate one or more <u>intermodulation products</u> inband of the signal of interest using one or more decimating filters;</p>	[AGREED]	[AGREED]	<p>the signal that results from mixing of jammer signals in the non-linearities of the system that result in generating interfering signals in the pass band of the signal of interest</p> <p>wherein jammer signal is any signal in the receive pass band that is not the intended signal of interest</p>

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>computing an estimate of each of the one or more <u>intermodulation products</u> from the source signals that generate the one or more <u>intermodulation products</u>;</p> <p>cancelling out one or more inband <u>intermodulation products</u> using the estimate of the <u>intermodulation products</u>; and</p> <p>performing phase and amplitude adjustment on estimations of the <u>intermodulation product</u> interfering signals in a closed loop manner, wherein performing phase and amplitude adjustment of the estimations comprises performing sub-sample phase shifts to make a phase adjustment on the estimations of the <u>intermodulation product</u> interfering signals.</p> <p><u>'134 patent, claim 2:</u></p> <p>An apparatus comprising:</p> <p>means for over-sampling, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference generating signals, the interference generating signals capable of generating <u>intermodulation products</u> inband of the signals of interest;</p> <p>means for isolating signals of interest in the bit stream using one or more decimating filters;</p> <p>means for isolating source signals that generate one or more <u>intermodulation products</u> inband of the signal of interest using one or more decimating filters;</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>means for computing an estimate of each of the one or more <u>intermodulation products</u> from the source signals that generate the one or more <u>intermodulation products</u>;</p> <p>means for canceling out one or more inband <u>intermodulation products</u> using the estimate of the <u>intermodulation products</u>; and</p> <p>means for performing phase and amplitude adjustment on estimations of the <u>intermodulation product</u> interfering signals in a closed loop manner, wherein the means for performing phase and amplitude adjustment of the estimations comprises means for performing sub-sample phase shifts to make a phase adjustment on the estimations of the <u>intermodulation product</u> interfering signals.</p> <p><u>'134 patent, claim 3:</u></p> <p>An apparatus comprising:</p> <p>a sampling unit to sample, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference generating signals, the interference generating signals capable of generating <u>intermodulation products</u> inband of the signals of interest;</p> <p>one or more filters to isolate signals of interest and interfering signals in the bit stream;</p> <p>a cancellation unit to cancel out isolated interference generated signals using estimations of the <u>intermodulation products</u> generated by</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>the isolated interfering signals, wherein the estimations of the isolated interfering signals comprise estimations of <u>intermodulation products</u> falling inband of the signals of interest; and</p> <p>a phase and amplitude adjuster to adjust the phase and amplitude of estimations of the isolated interfering signals in a closed loop manner, wherein the phase and amplitude adjuster performs phase and amplitude adjustment of the estimations by making sub-sample phase shifts to make a phase adjustment on the estimations of the isolated interfering signals.</p> <p><u>'134 patent, claim 4:</u></p> <p>A method comprising:</p> <p>outputting a pair of identical digital samples from a sigma delta analog to digital converter (ADC) after sampling an intermediate frequency signal with the sigma delta ADC;</p> <p>applying a first decimating filter to one of the pair to perform a bandpass operation to obtain a signal of interest with in-band interference <u>intermodulation products</u>, wherein the first decimating filter comprises a finite impulse response (FIR) filter;</p> <p>applying a second decimating filter to the other pair to perform a band reject operation for the signal of interest to create out of band signals that are a source of the in-band interference</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p><u>intermodulation products</u>, wherein the second decimating filter comprises a FIR filter; generating an estimate of in-band intermodulation interference based on the out of band signals; and adding an inverted version of the estimate of in-band intermodulation interference to the signal of interest having the in-band interference <u>intermodulation products</u> to cancel interference caused thereby and create a resulting signal, wherein the first and second FIR filters are applied at a rate at which the sigma delta ADC is applied.</p> <p><u>'134 patent, claim 20:</u></p> <p>A method comprising: receiving a signal comprising a signal of interest and one or more source signals; generating a sampled data stream by oversampling the received signal over a receiver bandwidth at a low resolution; recovering one or more of the source signals from the sampled data stream; using a digital process to estimate an <u>intermodulation product</u> in real time using the one or more recovered source signals; generating an intermodulation cancellation signal in real time from the estimate of the <u>intermodulation product</u>; and</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
using the intermodulation cancellation signal to cancel the <u>intermodulation product</u> in a bandwidth of the signal of interest.			
<p>“decimating filter(s)”</p> <p><u>'134 patent, claim 1:</u></p> <p>A method comprising:</p> <p>over-sampling, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference generating signals, the interference generating signals capable of generating intermodulation products inband of the signals of interest;</p> <p>isolating signals of interest in the bit stream using one or more <u>decimating filters</u>;</p> <p>isolating source signals that generate one or more intermodulation products inband of the signal of interest using one or more <u>decimating filters</u>;</p> <p>computing an estimate of each of the one or more intermodulation products from the source signals that generate the one or more intermodulation products;</p> <p>cancelling out one or more inband intermodulation products using the estimate of the intermodulation products; and</p> <p>performing phase and amplitude adjustment on estimations of the intermodulation product interfering signals in a closed loop manner, wherein performing phase and amplitude</p>	[AGREED]	[AGREED]	a filter associated with the Sigma Delta Modulator or any digital down sampling filter

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>adjustment of the estimations comprises performing sub-sample phase shifts to make a phase adjustment on the estimations of the intermodulation product interfering signals.</p> <p><u>'134 patent, claim 2:</u></p> <p>An apparatus comprising:</p> <p>means for over-sampling, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference generating signals, the interference generating signals capable of generating intermodulation products inband of the signals of interest;</p> <p>means for isolating signals of interest in the bit stream using one or more <u>decimating filters</u>;</p> <p>means for isolating source signals that generate one or more intermodulation products inband of the signal of interest using one or more <u>decimating filters</u>;</p> <p>means for computing an estimate of each of the one or more intermodulation products from the source signals that generate the one or more intermodulation products;</p> <p>means for canceling out one or more inband intermodulation products using the estimate of the intermodulation products; and</p> <p>means for performing phase and amplitude adjustment on estimations of the intermodulation product interfering signals in a closed loop manner, wherein the means for</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>performing phase and amplitude adjustment of the estimations comprises means for performing sub-sample phase shifts to make a phase adjustment on the estimations of the intermodulation product interfering signals.</p> <p><u>'134 patent, claim 4:</u></p> <p>A method comprising: outputting a pair of identical digital samples from a sigma delta analog to digital converter (ADC) after sampling an intermediate frequency signal with the sigma delta ADC; applying a first <u>decimating filter</u> to one of the pair to perform a bandpass operation to obtain a signal of interest with in-band interference intermodulation products, wherein the first <u>decimating filter</u> comprises a finite impulse response (FIR) filter; applying a second <u>decimating filter</u> to the other pair to perform a band reject operation for the signal of interest to create out of band signals that are a source of the in-band interference intermodulation products, wherein the second <u>decimating filter</u> comprises a FIR filter; generating an estimate of in-band intermodulation interference based on the out of band signals; and adding an inverted version of the estimate of in-band intermodulation interference to the signal of interest having the in-band interference</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
intermodulation products to cancel interference caused thereby and create a resulting signal, wherein the first and second FIR filters are applied at a rate at which the sigma delta ADC is applied.			
<p>“transmitter signals”</p> <p><u>’775 patent, claim 1:</u></p> <p>A method for performing interference cancellation in a receiver, with a transmitter and the receiver being co-located with each other, the method comprising:</p> <p>generating intermodulation product (IMP) cancellation signals (ICSs) to cancel passive IMPs in the receiver, continuously and near real time, using copies of transmitter signals of the transmitter, wherein the passive IMPs are generated in passive transmitter components of the transmitter and receiver components of the receiver after a high powered amplifier (HPA) and transmitter filter of the transmitter, wherein the transmitter filter is coupled between the HPA and an antenna used by the transmitter, wherein generating the ICSs is based on a power series description of a non-linear process for generating the IMPs, and includes generating an n-th order ICS by, given three signals S1, S2 and S3, digitally multiplying and filtering $S1 \times S1 \times S2$ and $S1 \times S2 \times S2$ and $S1 \times S2 \times S3$ and $S1 \times S1 \times S3$ and $S2 \times S2 \times S3$ and</p>	[AGREED]	[AGREED]	signals output by a transmitter

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>S1×S3×S3 and S2×S3×S3, where n is an integer.</p> <p><u>'775 patent, claim 2:</u></p> <p>The method of claim 1, wherein the copies of the <u>transmitter signals</u> used in generating the ICSs are digital copies of the <u>transmitter signals</u>.</p> <p><u>'775 patent, claim 3:</u></p> <p>The method of claim 1, further comprising: capturing <u>transmitter signals</u> as analog signals at a transmitter output; and</p> <p>down-converting and sampling the captured <u>transmitter signals</u> to create the copies of <u>transmitter signals</u> used in generating the ICSs.</p> <p><u>'775 patent, claim 4:</u></p> <p>A method for cancelling passive intermodulation products (IMPs), comprising: generating, with a priori knowledge of a <u>transmitter signal</u> set, continuous and real time IMP cancellation signals (ICSs) in a baseband digital signal set of a receiver co-located with a transmitter based on the <u>transmitter signal</u> set, wherein digital copies of the <u>transmitter signal</u> set are passed to the receiver, the passive IMPs are generated in the transmitter and receiver chain after a high power amplifier (HPA) and transmitter filters of</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>the transmitter, wherein the transmitter filters are coupled between the HPA and at least one antenna used by the transmitter, and wherein the transmitter filters are configured to significantly reduce active IMPs in band of a passband of the receiver wherein generating the ICSs is based on a power series description of a non-linear process for generating the IMPs, and includes generating a 3rd order ICS by, given three signals S1, S2 and S3, digitally multiplying and filtering $S1 \times S1 \times S2$ and $S1 \times S2 \times S2$ and $S1 \times S2 \times S3$ and $S1 \times S1 \times S3$ and $S2 \times S2 \times S3$ and $S1 \times S3 \times S3$ and $S2 \times S3 \times S3$.</p> <p><u>'775 patent, claim 9:</u></p> <p>The method of claim 4, wherein generating the odd order ICSs comprises:</p> <p>digitally multiplying and filtering an odd number of digital signals, up to "n" in number, from the <u>transmitter signal</u> set.</p> <p><u>'775 patent, claim 10:</u></p> <p>The method of claim 4, wherein generating the ICSs includes digital multiplication of the <u>transmitter signals</u> in a digital domain with a standard compression model of a nonlinear device model by convolving a composite <u>transmitter signal</u> set with a compression curve function.</p> <p><u>'775 patent, claim 16:</u></p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>A method comprising:</p> <p>receiving a digital copy of a <u>transmitter signal</u> at a receiver, the receiver co-located with a transmitter that generates the <u>transmitter signal</u>; and</p> <p>generating digital passive intermodulation product (IMP) cancellation signals (ICSs) to digitally, continuously and in real time, cancel passive IMPs falling within a receiver passband, the passive IMPs being generated after a high powered amplifier (HPA) and a transmitter filter of the transmitter, wherein the transmitter filter is coupled between the HPA and an antenna used by the transmitter, wherein generating the ICSs is based on a power series description of a non-linear process for generating the IMPs, and includes generating an n-th order ICS by given three signals S1, S2 and S3, digitally multiplying and filtering $S1 \times S1 \times S2$ and $S1 \times S2 \times S2$ and $S1 \times S2 \times S3$ and $S1 \times S1 \times S3$ and $S2 \times S2 \times S3$ and $S1 \times S3 \times S3$ and $S2 \times S3 \times S3$, where n is an integer.</p> <p><u>'775 patent, claim 17:</u></p> <p>A method comprising: creating one or more composite passive intermodulation product (IMP) cancellation signals (ICS s) by digitally multiplying, sample by sample and in real and continuous time, a full passband of a composite digital <u>transmitter signal</u> set with one or more transmitter IMP cancellation signals (ICSs); and</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>filtering the transmitter ICSs to selectively pass ICSs for passive IMP cancellation in a receiver, the receiver co-located with a transmitter, the passive IMP cancellation to cancel passive IMPs generated after a high powered amplifier (HPA) and a transmitter filter of the transmitter, wherein the transmitter filter is coupled between the HPA and an antenna used by the transmitter, wherein generating the ICSs is based on a power series description of a non-linear process for generating the IMPs, and includes generating an n-th order ICS by, given three signals S1, S2 and S3, digitally multiplying and filtering $S1 \times S1 \times S2$ and $S1 \times S2 \times S2$ and $S1 \times S2 \times S3$ and $S1 \times S1 \times S3$ and $S2 \times S2 \times S3$ and $S1 \times S3 \times S3$ and $S2 \times S3 \times S3$, where n is an integer.</p> <p><u>'775 patent, claim 19:</u></p> <p>The method of claim 17, wherein individual digital baseband ICSs are each individually adjusted in phase and amplitude to minimize a cross correlation between residual passive IMPs generated in analog transmitter components, and wherein the ICS s are further generated from a selected set of signals from the composite digital <u>transmitter signal</u> set.</p> <p><u>'775 patent, claim 21:</u></p> <p>An apparatus comprising:</p> <p>a transmitter;</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>a receiver co-located with the transmitter; and circuitry to perform interference cancellation in the receiver, the circuitry configured to:</p> <p>generate intermodulation product (IMP) cancellation signals (ICSs) to cancel passive IMPs in the receiver, continuously and near real time, using copies of <u>transmitter signals</u>, wherein the passive IMPs are generated in passive transmitter and receiver components after a high powered amplifier (HPA) and transmitter filter, wherein the transmitter filter is coupled between the HPA and an antenna used by the transmitter, wherein the circuitry is further configured to generate the ICSs based on a power series description of a non-linear process for generating the IMPs, and is operable to generate an n-th order ICS by, given three signals S1, S2 and S3, digitally multiplying and filtering $S1 \times S1 \times S2$ and $S1 \times S2 \times S2$ and $S1 \times S2 \times S3$ and $S1 \times S1 \times S3$ and $S2 \times S2 \times S3$ and $S1 \times S3 \times S3$ and $S2 \times S3 \times S3$, where n is an integer.</p> <p><u>'775 patent, claim 22:</u></p> <p>The apparatus of claim 21, wherein the copies of the <u>transmitter signals</u> used in generating the ICSs are digital copies of the <u>transmitter signals</u>.</p> <p><u>'775 patent, claim 23:</u></p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>The apparatus of claim 21, wherein the circuitry is further configured to:</p> <p>capture <u>transmitter signals</u> as analog signals at a transmitter output; and</p> <p>down-convert and sample the captured <u>transmitter signals</u> to create the copies of <u>transmitter signals</u> used in generating the ICSs.</p> <p><u>'775 patent, claim 24:</u></p> <p>An apparatus comprising:</p> <p>a transmitter;</p> <p>a receiver co-located with the transmitter; and</p> <p>circuitry to cancel passive intermodulation products (IMPs) in the co-located receiver, the circuitry configured to:</p> <p>generate, with a priori knowledge of a <u>transmitter signal</u> set, continuous and real time IMP cancellation signals (ICSs) in a baseband digital signal set of the co-located receiver based on the <u>transmitter signal</u> set, wherein digital copies of the <u>transmitter signal</u> set are passed to the receiver, the passive IMPs are generated in the transmitter and receiver chain after a high power amplifier (HPA) and transmitter filters, wherein the transmitter filters are coupled between the HPA and at least one antenna used by the transmitter, and the transmitter filters are configured to significantly</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>reduce active IMPs in band of a passband of the receiver, wherein the circuitry is further configured to generate the ICSs based on a power series description of a non-linear process for generating the IMPs, and the circuitry is operable to generate a 3rd order ICS by, given three signals S1, S2 and S3, digitally multiplying and filtering $S1 \times S1 \times S2$ and $S1 \times S2 \times S2$ and $S1 \times S2 \times S3$ and $S1 \times S1 \times S3$ and $S2 \times S2 \times S3$ and $S1 \times S3 \times S3$ and $S2 \times S3 \times S3$.</p> <p><u>'775 patent, claim 29:</u></p> <p>The apparatus of claim 23, wherein the circuitry is further configured to:</p> <p>generate the odd order ICSs by digitally multiplying an odd number of digital signals, up to "n" in number, from the <u>transmitter signal</u> set; and</p> <p>filter the results to selectively create nth odd order active ICSs.</p> <p><u>'775 patent, claim 30:</u></p> <p>The apparatus of claim 24, wherein the circuitry is further configured to:</p> <p>generate the ICS s via digital multiplication of the <u>transmitter signals</u> in a digital domain with a standard compression model of a nonlinear device model by convolving a composite <u>transmitter signal</u> set with a compression curve function.</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p><u>'775 patent, claim 36:</u></p> <p>An apparatus comprising:</p> <p>a transmitter;</p> <p>a co-located receiver; and</p> <p>circuitry configured to:</p> <p>receive a digital copy of a <u>transmitter signal</u> at the co-located receiver; and</p> <p>generate digital passive intermodulation product (IMP) cancellation signals (ICSs) to digitally, continuously and in real time, cancel passive IMPs falling within a receiver passband, the passive IMPs being generated after a high powered amplifier (HPA) and a transmitter filter of the transmitter, wherein the transmitter filter is coupled between the HPA and an antenna used by the transmitter, wherein the ICSs are generated based on a power series description of a non-linear process for generating the IMPs, and an n-th order ICS is generated by, given three signals S1, S2 and S3, digitally multiplying and filtering $S1 \times S1 \times S2$ and $S1 \times S2 \times S2$ and $S1 \times S2 \times S3$ and $S1 \times S1 \times S3$ and $S2 \times S2 \times S3$ and $S1 \times S3 \times S3$ and $S2 \times S3 \times S3$, where n is an integer.</p> <p><u>'775 patent, claim 37:</u></p> <p>An apparatus comprising: a transmitter; a receiver co-located with the transmitter; and circuitry configured to: create one or more</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>composite passive intermodulation product (IMP) cancellation signals (ICSs) by digitally multiplying, sample by sample and in real and continuous time, a full passband of a composite digital transmitter signal set with one or more transmitter IMP cancellation signals (ICSs); and filter the transmitter ICSs to selectively pass ICSs for passive IMP cancellation in a co-located receiver, the passive IMP cancellation to cancel passive IMPs generated after a high powered amplifier (HPA) and a transmitter filter of the transmitter, wherein the transmitter filter is coupled between the HPA and an antenna used by the transmitter, wherein the ICSs are generated based on a power series description of a non-linear process for generating the IMPs, and a 3rd order ICS is generated by, given three signals S1, S2 and S3, digitally multiplying and filtering $S1 \times S1 \times S2$ and $S1 \times S2 \times S2$ and $S1 \times S2 \times S3$ and $S1 \times S1 \times S3$ and $S2 \times S2 \times S3$ and $S1 \times S3 \times S3$ and $S2 \times S3 \times S3$.</p> <p><u>'775 patent, claim 39:</u></p> <p>The apparatus of claim 37, wherein the circuitry is further configured to:</p> <p>individually adjust, in phase and amplitude, each digital baseband ICSs to minimize a cross correlation between residual passive IMPs generated in analog transmitter components, wherein the ICS s are further generated from a</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
selected set of signals from the composite digital transmitter signal set.			
<p>“means for isolating signals of interest in the bit stream using one or more decimating filters”</p> <p><u>’134 patent, claim 2:</u></p> <p>An apparatus comprising:</p> <p>means for over-sampling, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference generating signals, the interference generating signals capable of generating intermodulation products inband of the signals of interest;</p> <p><u>means for isolating signals of interest in the bit stream using one or more decimating filters;</u></p> <p>means for isolating source signals that generate one or more intermodulation products inband of the signal of interest using one or more decimating filters;</p> <p>means for computing an estimate of each of the one or more intermodulation products from the source signals that generate the one or more intermodulation products;</p> <p>means for canceling out one or more inband intermodulation products using the estimate of the intermodulation products; and</p> <p>means for performing phase and amplitude adjustment on estimations of the intermodulation product interfering signals in a</p>	[AGREED]	[AGREED]	<p>§112, ¶6:</p> <p><u>Function:</u> isolating signals of interest in the bit stream</p> <p><u>Structure:</u> one or more decimating filters</p>

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
closed loop manner, wherein the means for performing phase and amplitude adjustment of the estimations comprises means for performing sub-sample phase shifts to make a phase adjustment on the estimations of the intermodulation product interfering signals.			
<p>“means for isolating source signals that generate one or more intermodulation products inband of the signal of interest using one or more decimating filters”</p> <p><u>'134 patent, claim 2:</u></p> <p>An apparatus comprising: means for over-sampling, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference generating signals, the interference generating signals capable of generating intermodulation products inband of the signals of interest; means for isolating signals of interest in the bit stream using one or more decimating filters; means for isolating source signals that generate <u>one or more intermodulation products inband of the signal of interest using one or more decimating filters</u>; means for computing an estimate of each of the one or more intermodulation products from the source signals that generate the one or more intermodulation products;</p>	[AGREED]	[AGREED]	<p>§112, ¶6:</p> <p><u>Function</u>: isolating source signals that generate one or more intermodulation products inband of the signal of interest</p> <p><u>Structure</u>: one or more decimating filters</p>

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>means for canceling out one or more inband intermodulation products using the estimate of the intermodulation products; and</p> <p>means for performing phase and amplitude adjustment on estimations of the intermodulation product interfering signals in a closed loop manner, wherein the means for performing phase and amplitude adjustment of the estimations comprises means for performing sub-sample phase shifts to make a phase adjustment on the estimations of the intermodulation product interfering signals.</p>			
<p>“means for over-sampling, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference generating signals”</p> <p><u>'134 patent, claim 2:</u></p> <p>An apparatus comprising:</p> <p><u>means for over-sampling, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference generating signals,</u> the interference generating signals capable of generating intermodulation products inband of the signals of interest;</p> <p>means for isolating signals of interest in the bit stream using one or more decimating filters;</p>	<p>§ 112, ¶6:</p> <p>Function: over-sampling, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference generating signals</p> <p>Structure: sampling rate multiplier comprising one or more Sigma Delta Modulators or Flash A/D converters in a radio receiver, as well as</p>	<p>112, para. 6:</p> <p>Function: over-sampling, at a desired frequency, a passband of received signals to create a bit stream wherein the received signals include signals of interest and interference generating signals.</p> <p>Structure: one or more sigma delta modulators or flash ADCs that generate low resolution high bit rate digital</p>	

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>means for isolating source signals that generate one or more intermodulation products inband of the signal of interest using one or more decimating filters;</p> <p>means for computing an estimate of each of the one or more intermodulation products from the source signals that generate the one or more intermodulation products;</p> <p>means for canceling out one or more inband intermodulation products using the estimate of the intermodulation products; and</p> <p>means for performing phase and amplitude adjustment on estimations of the intermodulation product interfering signals in a closed loop manner, wherein the means for performing phase and amplitude adjustment of the estimations comprises means for performing sub-sample phase shifts to make a phase adjustment on the estimations of the intermodulation product interfering signals.</p>	<p>equivalents thereof</p>	<p>samples of the passband.</p>	
<p>“means for computing an estimate of each of the one or more intermodulation products from the source signals that generate the one or more intermodulation products”</p> <p><u>'134 patent, claim 2:</u></p> <p>An apparatus comprising:</p> <p>means for over-sampling, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference</p>	<p>§112, ¶6:</p> <p>Function: computing an estimate of each of the one or more intermodulation products from the source signals that generate the one or more intermodulation products</p>	<p>112, para. 6:</p> <p>Function: computing an estimate of each of the one or more intermodulation products from the source signals that generate the one or more intermodulation products</p>	

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>generating signals, the interference generating signals capable of generating intermodulation products inband of the signals of interest; means for isolating signals of interest in the bit stream using one or more decimating filters; means for isolating source signals that generate one or more intermodulation products inband of the signal of interest using one or more decimating filters;</p> <p><u>means for computing an estimate of each of the one or more intermodulation products from the source signals that generate the one or more intermodulation products;</u></p> <p>means for canceling out one or more inband intermodulation products using the estimate of the intermodulation products; and means for performing phase and amplitude adjustment on estimations of the intermodulation product interfering signals in a closed loop manner, wherein the means for performing phase and amplitude adjustment of the estimations comprises means for performing sub-sample phase shifts to make a phase adjustment on the estimations of the intermodulation product interfering signals.</p>	<p>Structure: a radio receiver with an intermodulation compensator, as well as equivalents thereof</p>	<p>Structure: general purpose processor; algorithm: estimating the frequency of each of the one or more intermodulation products by multiplying source signals that generate the one or more intermodulation products with each other in the time domain, and estimating the amplitude of each of the one or more intermodulation products using the IIP3 or IIP2 estimate of the system</p>	
<p>“means for canceling out one or more inband intermodulation products using the estimate of the intermodulation products”</p> <p><u>'134 patent, claim 2:</u></p> <p>An apparatus comprising:</p>	<p>§112, ¶6:</p>	<p>112, para. 6:</p>	

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>means for over-sampling, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference generating signals, the interference generating signals capable of generating intermodulation products inband of the signals of interest;</p> <p>means for isolating signals of interest in the bit stream using one or more decimating filters;</p> <p>means for isolating source signals that generate one or more intermodulation products inband of the signal of interest using one or more decimating filters;</p> <p>means for computing an estimate of each of the one or more intermodulation products from the source signals that generate the one or more intermodulation products;</p> <p><u>means for canceling out one or more inband intermodulation products using the estimate of the intermodulation products;</u> and</p> <p>means for performing phase and amplitude adjustment on estimations of the intermodulation product interfering signals in a closed loop manner, wherein the means for performing phase and amplitude adjustment of the estimations comprises means for performing sub-sample phase shifts to make a phase adjustment on the estimations of the intermodulation product interfering signals.</p>	<p>Function: canceling out one or more inband intermodulation products using the estimate of the intermodulation products</p> <p>Structure: a radio receiver with an intermodulation compensator, as well as equivalents thereof</p>	<p>Function: canceling out one or more inband intermodulation products using the estimate of the intermodulation products</p> <p>Structure: an inverter and an adder</p>	
<p>“means for performing phase and amplitude adjustment on estimations of the</p>	<p>§112, ¶6:</p>	<p>112, para. 6:</p>	

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>intermodulation product interfering signals in a closed loop manner, wherein the means for performing phase and amplitude adjustment of the estimations comprises means for performing subsample phase shifts to make a phase adjustment on the estimations of the intermodulation product interfering signals”</p> <p><u>'134 patent, claim 2:</u></p> <p>An apparatus comprising: means for over-sampling, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference generating signals, the interference generating signals capable of generating intermodulation products inband of the signals of interest; means for isolating signals of interest in the bit stream using one or more decimating filters; means for isolating source signals that generate one or more intermodulation products inband of the signal of interest using one or more decimating filters; means for computing an estimate of each of the one or more intermodulation products from the source signals that generate the one or more intermodulation products; means for canceling out one or more inband intermodulation products using the estimate of the intermodulation products; and</p>	<p>Function: performing phase and amplitude adjustment on estimations of the intermodulation product interfering signals in a closed loop manner, wherein the means for performing phase and amplitude adjustment of the estimations comprises means for performing subsample phase shifts to make a phase adjustment on the estimations of the intermodulation product interfering signals</p> <p>Structure: a radio receiver with an intermodulation compensator, and equivalents thereof</p>	<p>Function: performing phase and amplitude adjustment on estimations of the intermodulation product interfering signals in a closed loop manner</p> <p>Structure: general purpose processor; algorithm as disclosed in col. 17, lines 4-51</p>	

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p><u>means for performing phase and amplitude adjustment on estimations of the intermodulation product interfering signals in a closed loop manner, wherein the means for performing phase and amplitude adjustment of the estimations comprises means for performing sub-sample phase shifts to make a phase adjustment on the estimations of the intermodulation product interfering signals.</u></p>			
<p>“a sampling unit to sample, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference generating signals”</p> <p><u>’134 patent, claim 3:</u></p> <p>An apparatus comprising: <u>a sampling unit to sample, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference generating signals,</u> the interference generating signals capable of generating intermodulation products inband of the signals of interest; one or more filters to isolate signals of interest and interfering signals in the bit stream; a cancellation unit to cancel out isolated interference generated signals using estimations of the intermodulation products generated by</p>	<p>Plain and ordinary meaning.</p> <p>To the extent the Court believes this term is governed by §112, ¶6:</p> <p>Function: sample, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference generating signals</p> <p>Structure: sampling rate multiplier comprising one or more Sigma Delta Modulators or Flash A/D</p>	<p>112, para. 6:</p> <p>Function: sample, at a desired frequency, a passband of received signals to create a bit stream</p> <p>Structure: one or more sigma delta modulators or flash ADCs that generate low resolution high bit rate digital samples of the passband</p>	

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>the isolated interfering signals, wherein the estimations of the isolated interfering signals comprise estimations of intermodulation products falling inband of the signals of interest; and</p> <p>a phase and amplitude adjuster to adjust the phase and amplitude of estimations of the isolated interfering signals in a closed loop manner, wherein the phase and amplitude adjuster performs phase and amplitude adjustment of the estimations by making sub-sample phase shifts to make a phase adjustment on the estimations of the isolated interfering signals.</p>	<p>converters in a radio receiver, as well as equivalents thereof</p>		
<p>“a cancellation unit to cancel out isolated interference generated signals using estimations of the intermodulation products generated by the isolated interfering signals, wherein the estimations of the isolated interfering signals comprise estimations of intermodulation products falling inband of the signals of interest”</p> <p><u>'134 patent, claim 3:</u></p> <p>An apparatus comprising: a sampling unit to sample, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference generating signals, the interference generating</p>	<p>Plain and ordinary meaning.</p> <p>To the extent the Court believes this term is governed by §112, ¶6:</p> <p>Function: canceling out isolated interference generated signals using estimations of the intermodulation products generated by the isolated interfering signals, wherein the estimations of the isolated interfering signals comprise</p>	<p>112, para. 6:</p> <p>Function: cancel out isolated interference generated signals using estimations of the intermodulation products generated by the isolated interfering signals</p> <p>Structure: an inverter and an adder</p>	

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>signals capable of generating intermodulation products inband of the signals of interest; one or more filters to isolate signals of interest and interfering signals in the bit stream; <u>a cancellation unit to cancel out isolated interference generated signals using estimations of the intermodulation products generated by the isolated interfering signals, wherein the estimations of the isolated interfering signals comprise estimations of intermodulation products falling inband of the signals of interest</u>; and</p> <p>a phase and amplitude adjuster to adjust the phase and amplitude of estimations of the isolated interfering signals in a closed loop manner, wherein the phase and amplitude adjuster performs phase and amplitude adjustment of the estimations by making sub-sample phase shifts to make a phase adjustment on the estimations of the isolated interfering signals.</p>	<p>estimations of intermodulation products falling inband of the signals of interest</p> <p>Structure: a radio receiver with an intermodulation compensator, as well as equivalents thereof</p>		
<p>“a phase and amplitude adjuster to adjust the phase and amplitude of estimations of the isolated interfering signals in a closed loop manner, wherein the phase and amplitude adjuster performs phase and amplitude adjustment of the estimations by making sub-sample phase shifts to make a phase adjustment on the estimations of the isolated interfering signals”</p>	<p>Plain and ordinary meaning.</p> <p>To the extent the Court believes this term is governed by §112, ¶6:</p> <p>Function: performing phase and amplitude adjustment on estimations</p>	<p>112, para. 6:</p> <p>Function: adjust the phase and amplitude of estimations of the isolated interfering signals in a closed loop manner, wherein the phase and amplitude adjuster performs phase</p>	

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p><u>'134 patent, claim 3:</u></p> <p>An apparatus comprising: a sampling unit to sample, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference generating signals, the interference generating signals capable of generating intermodulation products inband of the signals of interest; one or more filters to isolate signals of interest and interfering signals in the bit stream; a cancellation unit to cancel out isolated interference generated signals using estimations of the intermodulation products generated by the isolated interfering signals, wherein the estimations of the isolated interfering signals comprise estimations of intermodulation products falling inband of the signals of interest; and</p> <p><u>a phase and amplitude adjuster to adjust the phase and amplitude of estimations of the isolated interfering signals in a closed loop manner, wherein the phase and amplitude adjuster performs phase and amplitude adjustment of the estimations by making sub-sample phase shifts to make a phase adjustment on the estimations of the isolated interfering signals.</u></p>	<p>of the intermodulation product interfering signals in a closed loop manner, wherein the means for performing phase and amplitude adjustment of the estimations comprises means for performing subsample phase shifts to make a phase adjustment on the estimations of the intermodulation product interfering signals</p> <p>Structure: a radio receiver with an intermodulation compensator, and equivalents thereof</p>	<p>and amplitude adjustment of the estimations by making sub-sample phase shifts to make a phase adjustment on the estimations of the isolated interfering signals</p> <p>Structure: general purpose processor; algorithm as disclosed in col. 17, lines 4-51</p>	

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>“oversampling . . . at a low resolution” <u>'134 patent, claim 20:</u> A method comprising: receiving a signal comprising a signal of interest and one or more source signals; generating a sampled data stream by oversampling the received signal over a receiver bandwidth at a low resolution; recovering one or more of the source signals from the sampled data stream; using a digital process to estimate an intermodulation product in real time using the one or more recovered source signals; generating an intermodulation cancellation signal in real time from the estimate of the intermodulation product; and using the intermodulation cancellation signal to cancel the intermodulation product in a bandwidth of the signal of interest.</p>	<p>Plain and ordinary meaning.</p> <p>Alternatively, to the extent that the Court believes this term requires construction: “oversampling . . . at a resolution that avoids aliasing”</p>	<p>low resolution means “less than or equal to 4 bits”</p>	
<p>“a transmitter and the receiver being co-located with each other” / “a receiver co-located with a transmitter” / “co-located receiver” <u>'775 patent, claim 1:</u> A method for performing interference cancellation in a receiver, with a transmitter and the receiver being co-located with each other, the method comprising:</p>	<p>Plain and ordinary meaning.</p> <p>Alternatively, to the extent that the Court believes these terms require construction:</p>	<p>a receiver located in the vicinity of, but not associated with, the transmitter</p>	

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>generating intermodulation product (IMP) cancellation signals (ICSs) to cancel passive IMPs in the receiver, continuously and near real time, using copies of transmitter signals of the transmitter, wherein the passive IMPs are generated in passive transmitter components of the transmitter and receiver components of the receiver after a high powered amplifier (HPA) and transmitter filter of the transmitter, wherein the transmitter filter is coupled between the HPA and an antenna used by the transmitter, wherein generating the ICSs is based on a power series description of a non-linear process for generating the IMPs, and includes generating an n-th order ICS by, given three signals S1, S2 and S3, digitally multiplying and filtering $S1 \times S1 \times S2$ and $S1 \times S2 \times S2$ and $S1 \times S2 \times S3$ and $S1 \times S1 \times S3$ and $S2 \times S2 \times S3$ and $S1 \times S3 \times S3$ and $S2 \times S3 \times S3$, where n is an integer.</p> <p><u>'775 patent, claim 4:</u></p> <p>A method for cancelling passive intermodulation products (IMPs), comprising:</p> <p>generating, with a priori knowledge of a transmitter signal set, continuous and real time IMP cancellation signals (ICSs) in a baseband digital signal set of a <u>receiver co-located with a transmitter</u> based on the transmitter signal set, wherein digital copies of the transmitter signal set are passed to the receiver, the passive</p>	<p>“co-located receiver” – the definition in the specification applies, and the phrase means “a receiver located in the vicinity of the self communications terminal, but not associated with the self terminal,” where “self communications terminal” and “self terminal” mean “the receiver and transmitter of the target system (central system to discussion)”</p> <p>“transmitter and the receiver being co-located with each other” / “receiver co-located with [a/the] transmitter” – in these instances, “co-located” means “in the vicinity [of]”</p>		

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>IMPs are generated in the transmitter and receiver chain after a high power amplifier (HPA) and transmitter filters of the transmitter, wherein the transmitter filters are coupled between the HPA and at least one antenna used by the transmitter, and wherein the transmitter filters are configured to significantly reduce active IMPs in band of a passband of the receiver wherein generating the ICSs is based on a power series description of a non-linear process for generating the IMPs, and includes generating a 3rd order ICS by, given three signals S1, S2 and S3, digitally multiplying and filtering $S1 \times S1 \times S2$ and $S1 \times S2 \times S2$ and $S1 \times S2 \times S3$ and $S1 \times S1 \times S3$ and $S2 \times S2 \times S3$ and $S1 \times S3 \times S3$ and $S2 \times S3 \times S3$.</p> <p><u>'775 patent, claim 15:</u></p> <p>The method of claim 4, wherein the passive IMPs are cancelled in the <u>co-located receiver</u> by a digital process based on a power series description of the non-linear process in a transmitter hardware chain and is done with one or more ICSs in the receiver, and wherein the nonlinear power expansion is represented by a standard nonlinear amplitude control function or a compression curve.</p> <p><u>'775 patent, claim 16:</u></p> <p>A method comprising:</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>receiving a digital copy of a transmitter signal at a receiver, the <u>receiver co-located with a transmitter</u> that generates the transmitter signal; and</p> <p>generating digital passive intermodulation product (IMP) cancellation signals (ICSs) to digitally, continuously and in real time, cancel passive IMPs falling within a receiver passband, the passive IMPs being generated after a high powered amplifier (HPA) and a transmitter filter of the transmitter, wherein the transmitter filter is coupled between the HPA and an antenna used by the transmitter, wherein generating the ICSs is based on a power series description of a non-linear process for generating the IMPs, and includes generating an n-th order ICS by given three signals S1, S2 and S3, digitally multiplying and filtering $S1 \times S1 \times S2$ and $S1 \times S2 \times S2$ and $S1 \times S2 \times S3$ and $S1 \times S1 \times S3$ and $S2 \times S2 \times S3$ and $S1 \times S3 \times S3$ and $S2 \times S3 \times S3$, where n is an integer.</p> <p><u>'775 patent, claim 17:</u></p> <p>A method comprising: creating one or more composite passive intermodulation product (IMP) cancellation signals (ICS s) by digitally multiplying, sample by sample and in real and continuous time, a full passband of a composite digital transmitter signal set with one or more transmitter IMP cancellation signals (ICSs); and filtering the transmitter ICSs to selectively pass</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>ICSs for passive IMP cancellation in a receiver, the <u>receiver co-located with a transmitter</u>, the passive IMP cancellation to cancel passive IMPs generated after a high powered amplifier (HPA) and a transmitter filter of the transmitter, wherein the transmitter filter is coupled between the HPA and an antenna used by the transmitter, wherein generating the ICSs is based on a power series description of a non-linear process for generating the IMPs, and includes generating an n-th order ICS by, given three signals S1, S2 and S3, digitally multiplying and filtering $S1 \times S1 \times S2$ and $S1 \times S2 \times S2$ and $S1 \times S2 \times S3$ and $S1 \times S1 \times S3$ and $S2 \times S2 \times S3$ and $S1 \times S3 \times S3$ and $S2 \times S3 \times S3$, where n is an integer.</p> <p><u>'775 patent, claim 21:</u></p> <p>An apparatus comprising:</p> <p>a transmitter;</p> <p>a <u>receiver co-located with the transmitter</u>;</p> <p>and</p> <p>circuitry to perform interference cancellation in the receiver, the circuitry configured to:</p> <p>generate intermodulation product (IMP) cancellation signals (ICSs) to cancel passive IMPs in the receiver, continuously and near real time, using copies of transmitter signals, wherein the passive IMPs are generated in passive transmitter and receiver components</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>after a high powered amplifier (HPA) and transmitter filter, wherein the transmitter filter is coupled between the HPA and an antenna used by the transmitter, wherein the circuitry is further configured to generate the ICSs based on a power series description of a non-linear process for generating the IMPs, and is operable to generate an n-th order ICS by, given three signals S1, S2 and S3, digitally multiplying and filtering $S1 \times S1 \times S2$ and $S1 \times S2 \times S2$ and $S1 \times S2 \times S3$ and $S1 \times S1 \times S3$ and $S2 \times S2 \times S3$ and $S1 \times S3 \times S3$ and $S2 \times S3 \times S3$, where n is an integer.</p> <p><u>'775 patent, claim 24:</u></p> <p>An apparatus comprising:</p> <p>a transmitter;</p> <p>a <u>receiver co-located with the transmitter;</u></p> <p>and</p> <p>circuitry to cancel passive intermodulation products (IMPs) in the <u>co-located receiver</u>, the circuitry configured to:</p> <p>generate, with a priori knowledge of a transmitter signal set, continuous and real time IMP cancellation signals (ICSs) in a baseband digital signal set of the <u>co-located receiver</u> based on the transmitter signal set, wherein digital copies of the transmitter signal set are passed to the receiver, the passive IMPs are generated in the transmitter and receiver chain</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>after a high power amplifier (HPA) and transmitter filters, wherein the transmitter filters are coupled between the HPA and at least one antenna used by the transmitter, and the transmitter filters are configured to significantly reduce active IMPs in band of a passband of the receiver, wherein the circuitry is further configured to generate the ICSs based on a power series description of a non-linear process for generating the IMPs, and the circuitry is operable to generate a 3rd order ICS by, given three signals S1, S2 and S3, digitally multiplying and filtering $S1 \times S1 \times S2$ and $S1 \times S2 \times S2$ and $S1 \times S2 \times S3$ and $S1 \times S1 \times S3$ and $S2 \times S2 \times S3$ and $S1 \times S3 \times S3$ and $S2 \times S3 \times S3$.</p> <p><u>'775 patent, claim 35:</u></p> <p>The apparatus of claim 24, wherein the passive IMPs are cancelled in the <u>co-located receiver</u> by a digital process based on a power series description of the non-linear process in a transmitter hardware chain and is done with one or more ICSs in the receiver, and wherein the nonlinear power expansion is represented by a standard nonlinear amplitude control function or a compression curve.</p> <p><u>'775 patent, claim 36:</u></p> <p>An apparatus comprising: a transmitter;</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>a <u>co-located receiver</u>; and</p> <p>circuitry configured to:</p> <p>receive a digital copy of a transmitter signal at the <u>co-located receiver</u>; and</p> <p>generate digital passive intermodulation product (IMP) cancellation signals (ICSs) to digitally, continuously and in real time, cancel passive IMPs falling within a receiver passband, the passive IMPs being generated after a high powered amplifier (HPA) and a transmitter filter of the transmitter, wherein the transmitter filter is coupled between the HPA and an antenna used by the transmitter, wherein the ICSs are generated based on a power series description of a non-linear process for generating the IMPs, and an n-th order ICS is generated by, given three signals S1, S2 and S3, digitally multiplying and filtering $S1 \times S1 \times S2$ and $S1 \times S2 \times S2$ and $S1 \times S2 \times S3$ and $S1 \times S1 \times S3$ and $S2 \times S2 \times S3$ and $S1 \times S3 \times S3$ and $S2 \times S3 \times S3$, where n is an integer.</p> <p><u>'775 patent, claim 37:</u></p> <p>An apparatus comprising: a transmitter; <u>a receiver co-located with the transmitter</u>; and circuitry configured to: create one or more composite passive intermodulation product (IMP) cancellation signals (ICSs) by digitally multiplying, sample by sample and in real and continuous time, a full passband of a composite</p>			

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>digital transmitter signal set with one or more transmitter IMP cancellation signals (ICSs); and filter the transmitter ICSs to selectively pass ICSs for passive IMP cancellation in a <u>co-located receiver</u>, the passive IMP cancellation to cancel passive IMPs generated after a high powered amplifier (HPA) and a transmitter filter of the transmitter, wherein the transmitter filter is coupled between the HPA and an antenna used by the transmitter, wherein the ICSs are generated based on a power series description of a non-linear process for generating the IMPs, and a 3rd order ICS is generated by, given three signals S1, S2 and S3, digitally multiplying and filtering $S1 \times S1 \times S2$ and $S1 \times S2 \times S2$ and $S1 \times S2 \times S3$ and $S1 \times S1 \times S3$ and $S2 \times S2 \times S3$ and $S1 \times S3 \times S3$ and $S2 \times S3 \times S3$.</p>			
<p>“convolving a composite transmitter signal set with a compression curve function”</p> <p><u>’775 patent, claim 10:</u></p> <p>The method of claim 4, wherein generating the ICSs includes digital multiplication of the transmitter signals in a digital domain with a standard compression model of a nonlinear device model by <u>convolving a composite transmitter signal set with a compression curve function</u>.</p> <p><u>’775 patent, claim 18:</u></p>	<p>Plain and ordinary meaning.</p> <p>Alternatively, to the extent that the Court believes these terms require construction:</p> <p>“combining signals to create a new signal from the composite transmitter signal set using a</p>	<p>Indefinite</p>	

Disputed Term and Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
<p>The method of claim 17, wherein source signals that create the passive IMPs are digitally combined into a combined signal, and the combined signal is <u>convolved with a standard nonlinear compression curve</u> to create the ICSs.</p> <p><u>'775 patent, claim 30:</u></p> <p>The apparatus of claim 24, wherein the circuitry is further configured to:</p> <p>generate the ICS s via digital multiplication of the transmitter signals in a digital domain with a standard compression model of a nonlinear device model by <u>convolving a composite transmitter signal set with a compression curve function</u>.</p> <p><u>'775 patent, claim 38:</u></p> <p>The apparatus of claim 37, wherein the circuitry is further configured to:</p> <p>digitally combine source signals that create the passive IMPs into a combined signal, wherein the combined signal is <u>convolved with a standard nonlinear compression curve</u> to create the ICSs.</p>	<p>compression curve function”</p>		